Practicing DNA Transcription and Translation

For the following examples, give the appropriate sequence of DNA, mRNA, tRNA and/or polypeptide (AA = amino acids). ***Remember:*** *A codon chart can only be used for decoding a strand of* ***mRNA****.*



|  |  |
| --- | --- |
| Example 1: |  |
| DNA: | T A C | G C G | C C T | A G G | G G G | T G G |
| mRNA: |  \_ |   |   |   |   | \_ \_ |
| AA: |  \_ |  \_ |   |   |   |  \_ |
| Example 2: DNA: | T T C | G A T | T A G | A T G | C C G | A A G |
| mRNA: |  \_ |   |   |   |   | \_ \_ |
| tRNA: |  \_ |  \_ |   |   |   |  \_ |
| AA: |  \_ |  \_ |   |   |   |  \_ |
| Example 3: |  |  |  |  |  |  |
| DNA: | C \_ \_ | \_ G \_ | A \_ \_ | \_ A \_ | \_ \_ C | \_ T \_ |
| mRNA: | \_ U \_ | \_ \_ A | \_ \_ C | \_ \_ A | \_ G \_ | \_ A \_ |
| tRNA: | \_ A U | G \_ U | \_ U G | G \_ U | C C \_ | G \_ A |
| AA: |  \_ |  \_ |   |   |  \_ |   |

Protein Synthesis Overview Diagram

Label the summary of protein synthesis diagrammed below using the following terms: **transcription, translation, DNA, mRNA, ribosome, tRNA, amino acid, polypeptide, nucleus, codon, and anticodon.**

